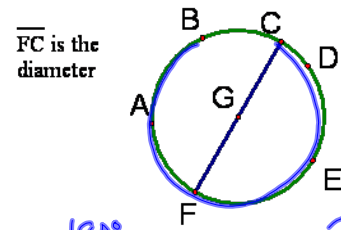


11-3 Arcs and Central Angles



Semicircle- measures 180° (name with 3 letters) FAC
CDF

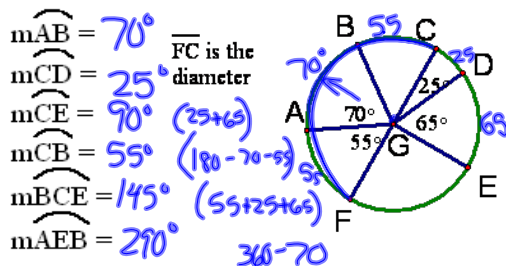
Minor arc- measures less than 180 (name with 2 letters) AF

Major arc- measures more than 180 (name with 3 letters) BAC

Central Angle-is an angle whose vertex is the center of the circle and whose sides are radii.

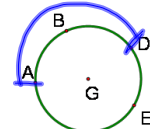


The measure of a minor arc is the measure of its central angle.



Postulate 16-Arc Addition Postulate-The measure of an arc formed by two adjacent arcs is the sum of the measures of the two arcs.

$$m\widehat{AD} = m\widehat{AB} + m\widehat{BD}$$



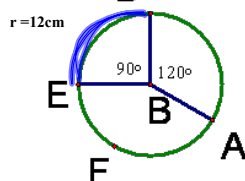
Arc Length-is a portion of the circumference

$$\text{Arc Length} = \frac{\text{Angle}}{360^\circ} \cdot 2\pi r$$

Find the length of \widehat{ED} =

$$\frac{90}{360} \cdot 2\pi \cdot 12$$

$$l = 6\pi \text{ cm}$$

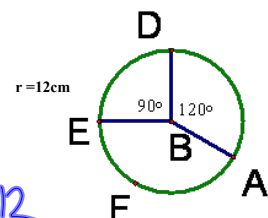


$$\text{Arc Length} = \frac{\text{Angle}}{360^\circ} \cdot 2\pi r$$

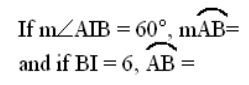
Find the length of \widehat{AD} =

$$\frac{120}{360} \cdot 2\pi \cdot 12$$

$$= 8\pi \text{ cm}$$



length of an arc uses π



HW
p604-606
13-39, 47-49